

Abstract

**NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES AND
SCREENING METHODS FOR IMMUNOSUPPRESSIVE AGENTS**

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The invention provides novel polypeptides which are associated with the transcription complex NF-AT, polynucleotides encoding such polypeptides, antibodies which are reactive with such polypeptides, polynucleotide hybridization probes and PCR amplification probes for detecting polynucleotides which encode such polypeptides, transgenes which encode such polypeptides, homologous targeting constructs that encode such polypeptides and/or homologously integrate in or near endogenous genes encoding such polypeptides, nonhuman transgenic animals which comprise functionally disrupted endogenous genes that normally encode such polypeptides, and transgenic nonhuman animals which comprise transgenes encoding such polypeptides. The invention also provides methods for detecting T cells (including activated T cells) in a cellular sample, methods for treating hyperactive or hypoactive T cell conditions, methods for screening for immunomodulatory agents, methods for diagnostic staging of lymphocyte differentiation, methods for producing NF-AT proteins for use as research or diagnostic reagents, methods for producing antibodies reactive with the novel polypeptides, and methods for producing transgenic nonhuman animals. Also included are methods and agents for activation of NF-AT dependent transcription, including agents which interfere with the production, modification of nuclear or cytoplasmic subunits, or the nuclear import of the cytoplasmic subunits. In particular, screening tests for novel immunosuppressants are provided based upon the ability of NF-AT to activate transcription.